IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Floran Prades, et al.

Serial No.: 10/587,058

Confirmation No.: 8986

Filed: July 21, 2006

For: Activating Supports for Metallocene

Catalysis.

Customer No: 25264

Group Art Unit: 1793

Examiner: JAMES A. CORNO JR.

Attorney Docket No. F-891

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PRE-APPEAL BRIEF

Appellants submit this Pre - Appeal Brief, responding to the decision of the Examiner of Group Art Unit 1793 dated July 01, 2009, finally rejecting Claims 23-42.

Arguments

I. THE EXAMINER ERRED IN REJECTING CLAIMS 23-42 UNDER 35 U.S.C. § 103(a), OVER BEST IN VIEW OF SAUDEMONT ET AL AND OVER SAUDEMONT ET AL IN VIEW OF BEST BECAUSE SAUDEMONT ET AL TEACHES AWAY FROM THE CLAIMED INVENTION.

Claims 23-42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Best in view of Saudemont et al and over Saudemont et al in view of Best.

With regard to Claim 23, the Examiner states that the *Best* reference teaches a catalyst support for polymerization of olefins comprising porous silica functionalized by contact with diethyl aluminum fluoride. The Examiner acknowledges that *Best* does not teach or disclose the heating steps for pyrolysis or the step of oxidation of the functionalized silica particles.

To cure the deficiencies of *Best*, Examiner included the *Saudemont et al* reference. The Examiner asserts in the office action that *Saudemont et al* teaches that the oxidation of functionalized silica particles at 200-600 degrees Celsius increases surface acidity and that such oxidation should be preceded by pyrolysis in an inert atmosphere.

The recent Supreme Court decision, KSR International Co. v. Teleflex, Inc., et al. 550 U.S. 398 (2007), discussed the case of United States V. Adams, 383 U.S. 39 (1966), stating that in that case, "[t]he Court relied upon the corollary principle that when the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be nonobvious." (KSR Opinion at p.12). Thus, if such teachings are present, there may be no reason or motivation to make the asserted combination/modification.

According to the MPEP, "A prima facie case of obviousness may also be rebutted by showing that the art, in any material respect, teaches away from the claimed invention." See MPEP § 2144.05 III., citing *In re Geisler*, 116 F.3d 1465, 1471, 43 USPQ2d 1362, 1366 (Fed. Cir. 1997). Also the MPEP states, "[a] prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead

away from the claimed invention." W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

In the instant case, Saudemont et al teaches that "[t]he direct use of aluminium and/or magnesium fluorides presents difficulties which are barely surmountable in terms of forming a support having suitable particle-size and porosity properties." The claimed invention, in Claim 23, includes the step of contacting the porous mineral oxide particles with a fluorinated functionalizing agent. This fluorinated functionalizing agent is defined in Applicant's Specification as containing aluminium fluoride (see Applicant's Specification, page 7). Thus, the teaching of Saudemont et al teaches away from the claimed invention, and therefore, a prima facie case of obviousness has not been established for Claim 23.

Furthermore, according to MPEP § 2145 X. (D)(3), proceeding contrary to accepted wisdom is evidence of nonobviousness. "Known disadvantages in old devices which would naturally discourage search for new inventions may be taken into account in determining obviousness." *United States v. Adams*, 383 U.S. 39, 52, 148 USPQ 479, 484 (1966). As stated above, Claim 23 includes the step of contacting the porous mineral oxide particles with a fluorinated functionalizing agent, which includes aluminium fluoride while *Saudemont* teaches that the direct use of aluminium fluoride "presents difficulties which are barely surmountable in terms of forming a support...". Therefore, the present claimed invention is nonobvious over the cited prior art by proceeding contrary to the accepted wisdom, depicted in *Saudemont*, that the direct use of aluminium fluorides is undesirable.

The Examiner argued in the final office action that while Saudemont et al indicates that the "direct use of aluminum and/or magnesium fluorides presents difficulties which are barely surmountable", such language leaves room for the possibility that these materials may be usable. However, according to the MPEP, "the prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise

discourage the solution claimed." In re Fulton, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004). Following the logic of this holding, a prior art disclosure does constitute a teaching away if the disclosure criticizes, discredits, or otherwise discourages the claimed invention. In this case, Saudemont et al teaches that "[t]he direct use of aluminium and/or magnesium fluorides presents difficulties which are barely surmountable in terms of forming a support having suitable particle-size and porosity properties." The claimed invention, in Claim 23, includes the step of contacting the porous mineral oxide particles with a fluorinated functionalizing agent. This fluorinated functionalizing agent is defined in Applicant's Specification as containing aluminium fluoride (see Applicant's Specification, page 7). Thus, the teaching of Saudemont et al teaches away from the claimed invention, and therefore, a prima facie case of obviousness has not been established for Claim 23.

Conclusion

Applicant believes that for at least the reasons stated above, all pending claims 23-42 are patentable over the cited art, and respectfully solicits their immediate allowance at the Examiner's earliest convenience.

Respectfully submitted,

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